

REMARKS

Claims 1-18 are currently pending. Claims 1, 6, 8, 11 and 12 are amended herein. No new matter has been added. Applicants respectfully request reconsideration of the above-identified application in light of the above amendments and the following remarks.

Applicants have deleted many paragraphs, as seen above in the Amendments to the Specification. Applicants have amended the paragraph beginning at page 2, line 8 to recite that one of the two states includes “a state in which the vehicle is behind the target guiding position.” Support for this amendment is found throughout the Specification and Drawings, for example, in the Specification at page 12, lines 11-21, in Figure 2, and in claim 1, as filed.

Applicants have amended the paragraph beginning at page 4, line 22 to better define Applicants’ invention by reciting that a brake operation guiding sound is “for guiding the driver at a start of a brake operation.” Support for this amendment is found throughout the Specification and Drawings, for example, in the Specification at page 13, lines 11-23, in Figure 2, and in claim 11, as filed.

Claim 1 has been amended to recite that one of the two states includes “a state in which the vehicle is behind the target guiding position.” Support for this amendment is found throughout the Specification and Drawings, for example, in the Specification at page 12, lines 11-21, in Figure 2, and in claim 1, as filed.

Claim 6 has been amended to better define Applicants’ invention by reciting that “elements” are different between the first and second information, and that at least another one of the elements changes based on vehicle position with respect to the target guiding position. Support for this amendment is found throughout the Specification and Drawings, for example, in

the Specification at page 12, lines 11-21, page 13, lines 11-19, in Figure 2, and in claim 6, as filed.

Claim 8 has been amended to better define Applicants' invention by reciting that the first position is selected based on an angular speed of the vehicle in a predetermined position before the vehicle reaches the "target guiding position." Support for this amendment is found throughout the Specification and Drawings, for example, in the Specification at page 13, lines 11-13, in Figure 2, and in claim 8, as filed.

Claim 11 has been amended to better define Applicants' invention by reciting that a brake operation guiding sound is "for guiding the driver at a start of a brake operation." Support for this amendment is found throughout the Specification and Drawings, for example, in the Specification at page 13, lines 11-23, in Figure 2, and in claim 11, as filed.

Claim 12 has been amended to better define Applicants' invention by reciting that the first position is selected based on an angular speed of the vehicle in a predetermined position before the vehicle reaches the "target guiding position." Support for this amendment is found throughout the Specification and Drawings, for example, in the Specification at page 13, lines 11-13, in Figure 2, and in claim 12, as filed.

Objections to the Specification

1. The Specification has been objected to for referencing claim numerals, since the claim numbering may change during the prosecution of the Application. As mentioned above and set forth in the Amendments to the Specification, the paragraphs beginning at page 31, line 8 through the paragraph beginning at page 33, line 18 have been deleted. Accordingly, any objection to the Specification on this ground has been rendered moot.

Claim Rejections under 35 U.S.C. §112

2. Claims 7-18 have been rejected under 35 U.S.C. §112, first paragraph, as allegedly not being enabling. Regarding claims 7 and 11, the Office Action argues that the feature “parking assisting information which includes a brake operation guiding sound” is not found in the disclosure pertaining to elected species I. However, Applicants draw the attention of the Examiner to page 12, lines 11-21 and page 13, lines 11-23, which illustrate examples as to how parking assisting information is relayed to a driver. Additionally, Applicants have amended claim 11 to recite that the “brake operation guiding sound [is] for guiding the driver at a start of a brake operation.”

Regarding claims 10 and 14, the Office Action further argues that the feature, “the first position selected by learning based on past data,” is also not found in the disclosure pertaining to elected species I. However, Applicants draw the attention of the Examiner Figure 12 and the description thereof at page 24, line 17- page 26, line 14, which together describe a learning aspect of the claimed invention.

Regarding claims 8 and 12, the Office Action indicates that these claims are unclear since the claim previously recited that “the first position is selected...before the vehicle reaches the first position.” As described above, Applicants have amended claims 8 and 12 to recite that “the first position is selected based on an angular speed of the vehicle in a predetermined position before the vehicle reaches the target guiding position.”

For the above reasons, Applicants believe that these claims, as amended satisfy the requirements of 35 U.S.C. §112 for enablement. Withdrawal of the rejection applied to claims 7-18 under 35 U.S.C. §112, first paragraph is respectfully requested.

Claim Rejections under 35 U.S.C. §102

3. Claims 1-6, 15 and 17 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 6,611,744 to Shimazaki et al. (“Shimazaki”). Applicants respectfully traverse this rejection.

Shimazaki cannot anticipate claims 1-6, 15 and 17 because it does not teach or suggest each and every feature of these claims. See MPEP §2131 (quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987)). (“[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”)). Independent claim 1, as amended, recites a parking assisting device comprising: means for setting a reference of a turning position of a vehicle; means for detecting a turning position of a vehicle based on the reference; and means for notifying a driver of parking assisting information concerning a target guiding position based on the detected turning position of a vehicle, wherein the parking assisting information comprises two kinds of information with forms different from each other provided in any two states, *including a state in which the vehicle is behind the target guiding position*, among three states consisting of a state in which the vehicle has reached the target guiding position and states in which the vehicle is in front of and behind the target guiding position, the two kinds of information informing the driver of at least two states among the three states” (emphasis added). In other words, as amended, independent claim 1 recites that the system notifies a driver in a situation where the vehicle has moved past (“behind”) a target guiding position.

In contrast, Shimazaki describes a steering assist apparatus providing a guide for a path to a target stopping position. Even though a guide to a stopping position (steering operation

position, e.g. position G in Figure 10 of Shimazaki) is output via a speaker, no notification is given by Shimazaki if a vehicle has passed the position (e.g., position G) without stopping.

Accordingly, Applicants submit that independent claim 1 defines patentable subject matter over Shimazaki. Since claims 2-6, 15 and 17 depend from independent claim 1, they too define patentable subject matter over Shimazaki. For these reasons, withdrawal of the rejection applied to claims 1-6, 15 and 17 under 35 U.S.C. §102(b) over Shimazaki is respectfully requested.

Claim Rejections under 35 U.S.C. §103

4. Claims 7-14, 16 and 18 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shimazaki in view of U.S. Patent No. 4,931,930 to Shyu et al. (“Shyu”). Applicants respectfully traverse this rejection.

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” MPEP §2143.03 (citing In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

The deficiencies of Shimazaki in teaching or suggesting the subject matter of amended claim 1 are set forth above. Shyu does not remedy these deficiencies. Shyu describes an automatic parking device for an automobile, but does not teach or suggest any guide for when a vehicle has passed a target stopping position without stopping.

In the invention as claimed in amended claim 1, different parking assisting information is output to a driver depending on whether a driver has stopped at the target guiding position (e.g., position P3 in Figure 14), or if a driver proceeded past (behind) the target guiding position (e.g., P3). Accordingly, the driver can recognize whether the vehicle has passed the

target guiding position (e.g.: P3) or not. As described above, Shimazaki does not teach or suggest such a feature.

Shyu describes a device for displaying predetermined distances to a target stopping position by using a pilot lamp 153. When the vehicle reaches a position in front of the target stopping position by a predetermined distance such as 20 cm or 10cm, the pilot lamp illuminates. However, in order to stop the vehicle at the target stopping position, the driver must determine when to apply the brake in response to the illumination of the pilot lamp, taking into consideration the velocity of the vehicle and the stopping distance of the vehicle. Such an estimation would be quite difficult for a driver to accurately determine. Accordingly, Shyu does not teach or suggest a system in which a driver is given information if the vehicle has traveled past a target guiding position, as recited in independent claim 1.

Regarding independent claim 11, this claim, as amended, recites, “[a] parking assisting device comprising: means for setting a reference of a turning position of a vehicle; means for detecting a turning position of a vehicle based on the reference; and means for notifying a driver of parking assisting information concerning a target guiding position based on the detected turning position of a vehicle, *wherein the parking assisting information includes a brake operation guiding sound for guiding the driver at a start of a brake operation that is provided in a first position before the vehicle reaches the target guiding position*” (emphasis added).

In amended claim 11, since a brake operation guiding sound is output in a first position before the vehicle reaches a target guiding position, the driver can easily stop the vehicle at the target guiding position by responding to the sound of the brake operation guiding

sound, thereby accurately stopping the car. As described above, this is not the case in either Shimazaki or Shyu, where no advance warning for brake application is provided.

For at least the above reasons, Applicants respectfully submit that independent claims 1 and 11, and all claims depending therefrom define patentable subject matter over Shimazaki and Shyu, alone or in combination. Withdrawal of the rejection applied to claims 7-14, 16 and 18 under 35 U.S.C. §103(a) over Shimazaki in view of Shyu is respectfully requested.

CONCLUSION

In light of the foregoing, Applicants respectfully submit that all claims, as currently presented, define patentable subject matter over the cited art, considered alone or in combination, and are in condition for allowance.

Respectfully submitted,
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